



**State of Louisiana
Coastal Protection and Restoration Authority**

2017 Annual Inspection Report

for

**Grand Liard Marsh and Ridge
Restoration (BA-68)**

State Project Number BA-68
Priority Project List 18

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Jefferson Parish &
Plaquemines Parish

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I. Introduction

The Grand Liard Marsh and Ridge Creation created a total of 450 acres of marsh utilizing dredged material from the Gulf of Mexico. This project utilized CWPPRA funds. The Grand Liard Marsh and Ridge Restoration project is located within the Barataria Basin of Plaquemines Parish, Louisiana, to the west of the community of Venice and southwest of the community of Boothville and on the West Bank of the Lower Mississippi River (Appendix A).

II. Project Description and History

The Coastal Wetlands Planning, Protection, and Restoration Act (CWPPRA) Task Force designated BA-68 as part of the 18th Priority Project List in 2009. The lead federal sponsor for the project was the National Marine Fisheries Service (NMFS), with funding approved through CWPPRA. The local sponsor for the project was the Louisiana Coastal Protection and Restoration Authority (at the time the Louisiana Office of Coastal Protection and Restoration). Over recent decades, a series of north-south oriented bayous (i.e., Bayou Long, Dry Cypress Bayou) and their associated ridges have deteriorated, resulting in large expanses of open water. The Bayou Grand Liard ridge, which separates the open bays of the Bastian Bay and Grand Liard mapping units, is the most prominent remaining ridge. Projections suggest that the remaining land will be completely converted to open water by 2050. The Grand Liard Marsh and Ridge Restoration project will re-establish some ridge and marsh function in the vicinity of Bayou Grand Liard through dedicated dredging, ridge restoration, and vegetative plantings.

The Grand Liard Marsh and Ridge Restoration project includes approximately 450 acres of marsh fill hydraulically dredged and transported from the Gulf of Mexico and 15,484 linear feet of maritime ridge habitat.

Project construction began on July 22, 2014, and was completed on September 16, 2015. Project life is estimated to be 20 years. Annual project inspections are planned.

An agreement was entered into by the CPRA and the Barataria-Terrebonne National Estuary Program (BTNEP) for BTNEP to collect and grow woody stemmed vegetation species for the purpose of the CPRA to have planted along the ridge around year three of the project life.

III. Inspection Purpose and Procedures

The purpose of the annual inspection of the Grand Liard Marsh and Ridge Restoration project (BA-68) is to evaluate the constructed project features to identify any deficiencies and prepare a report detailing the condition of project features and recommended corrective actions needed. The inspection procedure consists of a site visit by land or water as appropriate with a visual inspection of the project features. Should it be

determined that corrective actions are needed, CPRA shall provide, in the report, a detailed cost estimate for engineering, design, supervision, inspection, and construction contingencies, and an assessment of the urgency of such repairs (O&M Plan). The annual inspection report also contains a summary of maintenance projects and an estimated projected budget for the upcoming three (3) years for operation, maintenance and rehabilitation. The three (3) year projected operation and maintenance budget is shown in Appendix C.

An inspection of the Grand Liard Marsh and Ridge Restoration project (BA-68) was conducted on June 15, 2017 by Barry Richard of CPRA and Donna Rogers of NOAA Fisheries. There was a light wind and partly cloudy skies during the inspection. Photographs of that inspection are included in Appendix B of this report.

IV. Inspection Results

Marsh Restoration Areas

The containment dikes and fill areas appeared to be holding up well. The fill areas have varying degrees of vegetation. A marsh vegetative planting is planned for late 2018.

Ridge Restoration Area

The ridge restoration area appeared to be holding up well. A ridge vegetative planting is planned for late 2018.

V. Conclusions

The Grand Liard Marsh and Ridge Restoration project (BA-68) is performing as intended. No additional vegetative plantings are planned at this time.

VI. Recommendations

Immediate Repairs

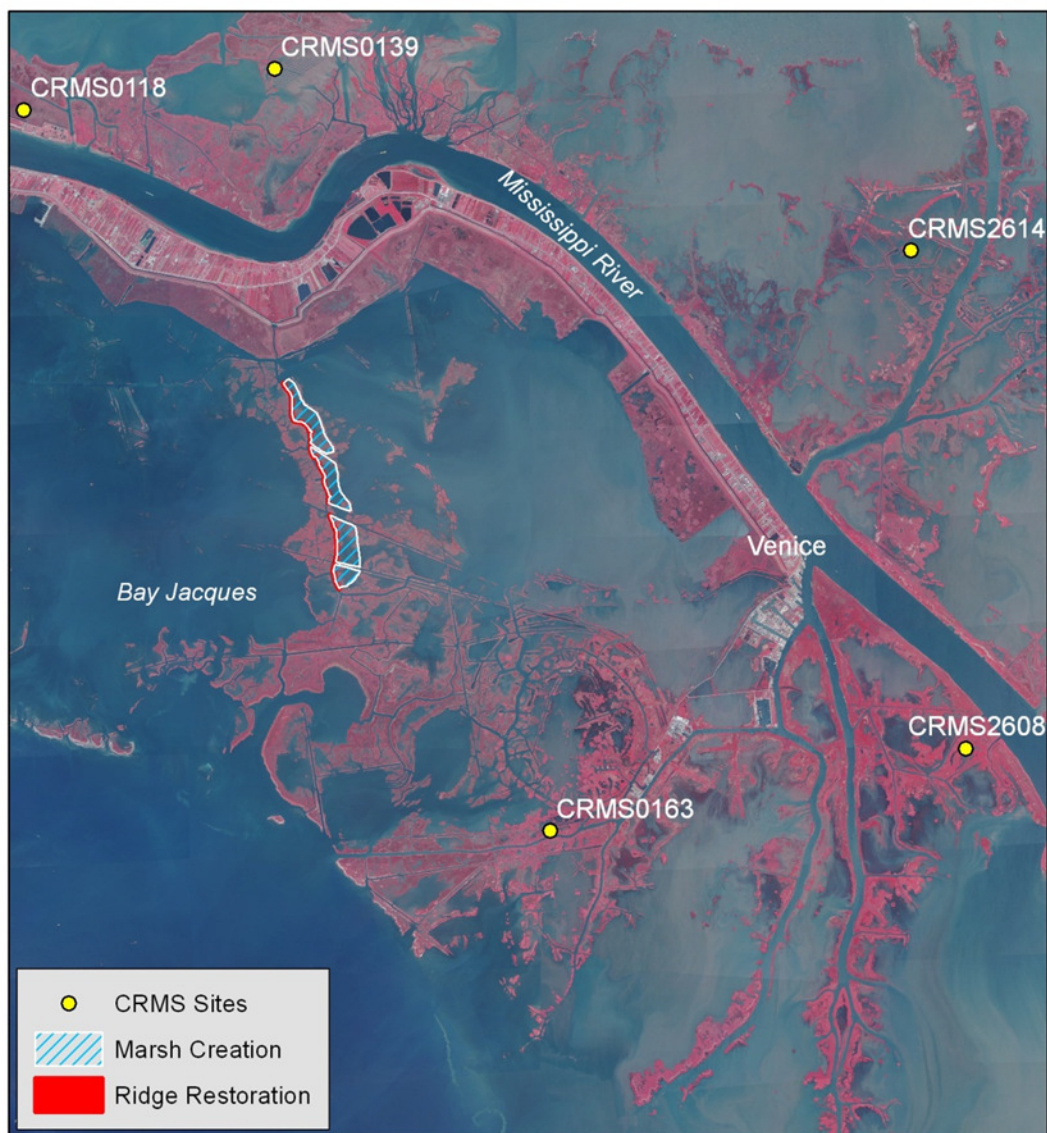
- No immediate repairs are necessary at this time.

Programmed Maintenance

- Continue to monitor the condition of the ridge and fill area.

Appendix A

Project Features Map



GRAND LIARD MARSH AND RIDGE RESTORATION (BA-68)

0 0.5 1 2
Miles

0 1.5 3 6
Kilometers



Map Produced by:
Coastal Protection and Restoration Authority
New Orleans Field Office
September 15, 2011

Background Imagery:
2008 CIR DOQQ



Appendix B

Photographs



Photo # 1 – Marsh Restoration Area



Photo # 2 – Marsh Restoration Area



Photo # 3 – Ridge Restoration



Photo # 4 – Ridge Restoration

Appendix C

Three Year Budget Projection

Grand Liard Marsh and Ridge Restoration (BA-68)

Federal Sponsor: NMFS

Construction Completed : 2015

PPL 18

Current Approved O&M Budget	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Project Life	Currently
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Budget	Funded
State O&M	\$35,077	\$6,200	\$276,415	\$6,200	\$39,008	\$6,200	\$6,200	\$6,200	\$6,200	\$44,206	\$6,200	\$6,200	\$6,200	\$6,200	\$6,200	\$6,200	\$6,200	\$6,200	\$6,200	\$6,200	\$493,906	\$362,900
Corps Admin	\$1,225	\$1,225	\$1,225	\$1,225	\$1,225	\$1,225	\$1,225	\$1,225	\$1,225	\$1,225	\$1,225	\$1,225	\$1,225	\$1,225	\$1,225	\$1,225	\$1,225	\$1,225	\$1,225	\$2,245	\$25,520	\$6,125
Federal S&A	\$9,074	\$0	\$16,192	\$0	\$4,830	\$0	\$0	\$0	\$0	\$10,028	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$40,124	\$30,096
Total																					\$559,550	\$399,121

Projected O&M Expenditures																					Remaining Project Life	Current Budget
Maintenance Inspection	\$6,200	\$6,200	\$6,200	\$6,200	\$6,200	\$6,200	\$6,200	\$6,200	\$6,200	\$6,200	\$6,200	\$6,200	\$6,200	\$6,200	\$6,200	\$6,200	\$6,200	\$6,200	\$6,200	\$6,200	\$111,600	\$18,600
Construction:																					\$0	\$0
Vegetative Plantings/Tallow Control	\$14,396		\$87,546		\$14,396					\$14,396											\$116,338	\$101,942
Dike Gapping			\$43,750																		\$43,750	\$43,750
Subtotal with 25% Contingency	\$17,995		\$164,120		\$17,995					\$17,995											\$200,110	\$182,115
State E&D	\$1,808		\$13,453		\$1,808					\$1,808											\$17,069	\$15,261
Construction Inspection	\$0		\$32,700		\$8,175					\$8,175											\$49,050	\$40,875
State S&A	\$9,074		\$16,192		\$4,830					\$10,028											\$31,050	\$21,022
Federal S&A	\$9,074		\$16,192		\$4,830					\$10,028											\$31,050	\$21,022
Total	\$44,151	\$6,200	\$292,607	\$6,200	\$43,838	\$6,200	\$6,200	\$6,200	\$6,200	\$54,234	\$6,200	\$6,200	\$6,200	\$6,200	\$6,200	\$6,200	\$6,200	\$6,200	\$6,200	\$6,200	\$483,679	\$342,645

O&M Expenditures from COE Report	\$803	Current O&M Budget less COE Admin	\$392,996	Current Project Life Budget less COE Admin	\$534,030
State O&M Expenditures not submitted for in-kind credit	\$0	Estimated O&M Expenditures to-date	\$803	Total Projected Project Life Budget	\$484,482
Federal Sponsor MIPRs (if applicable)	\$0	Remaining Available O&M Budget	\$392,193	Project Life Budget Surplus (Shortfall)	\$49,548
Total Estimated O&M Expenditures (as of Nov 2016)	\$803	Projected 3-Year Budget Expenditures	\$111,600		
		3-Year Budget Surplus (Shortfall Request)	\$280,593		

Appendix D

Field Inspection Form

MAINTENANCE INSPECTION REPORT CHECK SHEET

Project No. / Name: **BA-0068 Grand Liard Marsh and Ridge Restoration**

Date of Inspection: 06/15/2017

Time: 10:30 am

Structure No. N/A

Inspector(s): Richard (CPRA), Rogers (NOAA)

Structure Description: N/A

Water Level Inside: N/A Outside: N/A

Type of Inspection: Annual

Weather Conditions: Partly Cloudy, Light Wind

Item	Condition	Physical Damage	Corrosion	Photo #	Observations and Remarks
Marsh Restoration Area	Good	None	N/A	1,2	Vegetation coming in nicely.
Ridge Restoration Area	Good	None	N/A	3,4	Some vegetation, mostly barren. Collecting soil samples to test salinity levels for future plantings.
Sheet Pile Closures Containment	N/A	N/A	N/A		These closures were not observed at this time.
Sheet Pile Closures Ridge	Good	None	Minor		All closures still holding up. The large closure in Area A has sheet pile exposed . No issues at this time but will continue to observe.

Notes: No signs of vandalism in the project area.